NOTES ON AUSTRALIAN DIPTERA. No. xix.

By J. R. Malloch.

(Eleven Text-figures.)

[Read 24th April, 1929.]

Family Mycetophilidae.

Recently in comparing notes with Mr. F. W. Edwards of the British Museum, who was on a visit to Washington, he drew my attention to the fact that he had some time previously subdivided the old genus *Platyura* Meigen in a paper dealing with the British Mycetophilidae (*Trans. Ent. Soc. London*, 1925, pp. 505-662).

I had not received a copy of his paper nor of the one dealing with New Zealand species in which he collaborated with Mr. A. L. Tonnoir, so was unaware of the course he had pursued in the matter. It was therefore of interest to discover that we had independently made use of nearly identical characters for generic segregations. I have not seen *Arctoneura* Hutton or *Nervicincta* Marshall, which genera Edwards removes to the subfamily Ditomyiinae. One change that is necessary is the suppression of *Calliplatyura* Malloch in favour of *Proceroplatus* Edwards, the concepts being identical. It may be that *Isoneuromyia* Brunetti is the same as my *Xenoplatyura*, but it will be necessary to examine the genotype of the former to determine whether it possesses the characters mentioned as of generic import in my description before coming to a decision. *Neoplatyura* Malloch does not appear to have been considered by Edwards.

Family Tachinidae.

This family is one of the most difficult problems in the order for the systematist. It appears to be one of the most recent, and, having specialized habits, practically all of the species being parasitic, the diversity of characters is astonishing. Here, as in other families, the older authors adopted very broad generic concepts, frequently placing many quite distinct groups within the same genus so that it is usually impossible to identify their species without an examination of their type specimens. Robineau-Desvoidy added many genera, but his definitions are in a great many cases too vague, and as practically all of his collection has been lost, it is largely guesswork to decide what his genera really are, provided no older species were included. Subsequent to Robineau-Desvoidy's time the most pretentious work on the family is that by Brauer and von Bergenstamm, and though this is without doubt the best illustrated work on the family, even up to the present time, it is a very difficult one to understand and to use. In addition to these works, which deal more extensively with generic concepts than any previously published, there have appeared many papers by van der Wulp, and more recently by Townsend, in which numerous genera have been proposed.

Of revisional or comprehensive works on the family the best and most recent are those by Coquillett, and Williston, on North American, and by Lundbeck, and Stein, on European, forms.

I have at present but few Australian Tachinidae available, and present below a few notes on some of these. My recently published catalogue will give some idea of the number of species already recorded from Australia, but to elucidate many of the species it will be necessary to resort to type examination or extensive collecting in the localities from which the types were obtained. In some of my previously published papers in this series will be found notes on genera other than those now dealt with, and should opportunity offer I may at some future time further extend my presentation of data on the family.

Most of the material now before me is the property of the Australian Museum, but some species were obtained on loan from the United States National Museum, and a few from other sources. In all cases the location of the material is mentioned in the paper, and where there are new species represented by specimens received from Australia direct by me the type specimen will be returned to the sender for deposition in some Australian Museum.

Tribe **Phasiini.**

This tribe is variously treated by different authorities on the family, some considering it a subfamily and others giving it full family rank, though I consider the proper status is as above. The members of it have a rather peculiar habit, being quite stout, with a broadly ovate abdomen which generally lacks well developed dorsal bristles, and the small knob immediately in front of the base of wing on the pleura stands farther out than the equally small sclerite immediately above it.

Of the recorded Australian genera only *Hyalomyia* Robineau-Desvoidy and *Gymnosoma* Meigen belong here, but probably other genera occur.

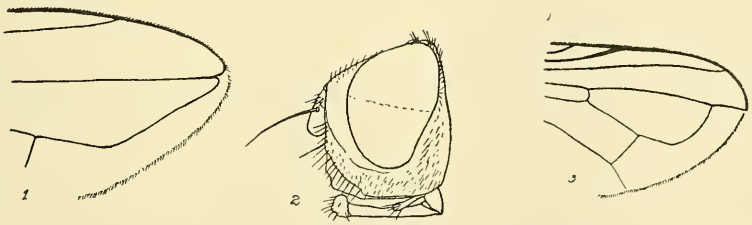
I have carefully examined the genotypes of nearly all of the genera placed in the tribe and am very decidedly of the opinion that there are altogether too many described genera which are distinguished by characters of little or no systematic value. The genus *Phasia* Latreille is one of the most readily distinguished of all, its genotype, *hemipterus* Fabricius, possessing long hairs on the central upper portion of the postalar declivity, and shorter hairs on the suprasquamal ridge and on a portion of the upper side near the outer margin of the upper calypter; the first posterior cell of the wing is closed at some distance from the margin of wing, but the apical section of fourth vein is much more oblique than in *Hyalomyia* and it is also more or less obviously undulated, which is not the case in that genus. The genera *Ectophasia* Townsend and *Xysta* Meigen have the first posterior cell of the wing open, but the former has numerous hairs laterad of the anterior fronto-orbital bristles and the facial ridges are furnished with long hairs on almost their entire extent, while *Xysta* has no hairs laterad of the fronto-orbital bristles, and the facial ridges are furnished with strong setulose hairs on only their lower portions and are bare from below level of apex of third antennal segment to upper margin. *Elomyia* Rondani is also a good genus, the principal distinguishing feature consisting of the unique character presented in the inward curvature of apex of costa and fourth vein (Text-fig. 1). I cannot see any reason why *Hyalomyia* Robineau-Desvoidy, *Austrophasia* Townsend, and *Phorantha* Rondani should be considered as distinct genera; in fact I would not consider them as entitled to subgeneric rank as Brauer did in 1893 (*Verh. Zool.-Bot. Ges.*, vol. 43, p. 497). Fine distinctions based upon wing venation are eminently unsatisfactory for the purpose of distinguishing genera, and Towns-

end's action in erecting *Austrophasia* on the basis of Macquart's figure of the wing of *Hyalomyia rufiventris* Macquart is indefensible.

Genus Hyalomyia Robineau-Desvoidy.

I have examined the type species of this genus, *pusilla* Meigen, and on the basis of that examination have arrived at the conclusion, already noted above, that there is no reason for the recognition of more than one valid genus in the group of species assigned to it, *Phorantha*, and *Austrophasia*. It is entirely possible that certain other workers would consider the three smaller species described below as entitled to generic separation from *nigrisquama* on the basis of the structure of the head, but I am of the opinion that in this family the variations of cephalic form have been given undue weight in generic segregation and consequently place all the Australian species now known to me in one genus.

So far as known the species referred to the genus as at present accepted by me are parasitic upon Hemiptera. I have before me an Indian species which, in one of its colour phases, agrees closely with the description of *Hyalomyia rufiventris* Macquart and this was reared from the red cotton bug (*Dysdercus* sp.). There is no indication of any rearing record on any of the Australian specimens.



Text-fig. 1.—Apex of wing of *Elomyia lateralis* Meigen.
Text-fig. 2.—Head of *Hyalomyia nigrisquama*, n. sp., from the side.
Text-fig. 3.—Apex of wing of *Hyalomyia nigrisquama*, n. sp.

In the material before me there are four species, three of them quite similar in most respects to *pusilla* Meigen, but differing in certain structural characters, while the fourth more nearly resembles the species usually placed in *Phorantha*, though there are but few hairs laterad of the inner series of bristles on the anterior portions of the frontal orbits. Below I present a key for the identification of the species, but do not include *rufiventris* which should be readily distinguished by the red abdomen, large size (7 mm.), and the pale squamae.

Key to the Species.

1. Large species, about 10 mm. in length; face projecting but little in profile (Text-fig. 2); scutellum with the apical pair of bristles well developed and situated at tip; extreme costal margin of wing, and the calyptrae, except the connecting margins, fuscous; venation of apical section of wing as Text-figure 3 ..... *nigrisquama*, n. sp.
   Smaller species, not more than 5 mm. in length; face much projecting in profile (Text-fig. 6); apical pair of scutellar bristles very short and fine, situated before apex, almost on disc; wings and calyptrae pale 2
2. The hairs on upper anterior portion of mesopleura normal, not flattened; wings brownish hyaline, apical venation as Text-figure 4; abdomen about as broad as long, fourth visible tergite very little longer than third and about three times as broad at base as long in centre ..... *lativentris*, n. sp.

Most, or all, of the hairs on upper anterior portion of mesopleura flattened, lanceolate or scale-like; wings whitish or hyaline; abdomen much longer than broad, fourth tergite very distinctly longer than third 3

3. Hairs on upper half of mesopleura golden yellow and very noticeably flattened; hind femora with long yellowish bristly hairs on basal four-fifths, black haired at apices ..... *lepidofera*, n. sp.

Hairs on upper half of mesopleura mostly black, the yellow hairs confined to anterior portion and but slightly flattened; hind femora entirely black haired .... *nigrihirta*, n. sp.

N.B.—It must be noted that only males are included in the above key, and that the females do not have the peculiar flattened mesopleural hairs mentioned above.

Hyalomyia nigrisquama, n. sp.

Male.—Head black; orbits, face, cheeks, and occiput whitish grey dusted, antennae black, second segment slightly reddish at apex, palpi reddish-yellow; hairs on cheeks and on occiput, except the postocular ciliae, white, frontal hairs black. Thorax black, whitish dusted on dorsum, when seen from behind with four black vittae, the central pair fused behind suture, forming a broad black central postsutural area; scutellum slightly grey dusted; hairs on pleura largely pale. Abdomen shining black, with a brownish tint basally, and bronzy or greenish apically, possibly variable in the species, without trace of dusting; hairs on abdomen all black. Legs black. Wings hyaline, fuscous at base of costa to slightly beyond humeral cross-vein. Calyptrae fuscous, white at connecting portions, lower one brownish on disc.

Eyes bare; frons almost linear above, orbits with fine short hairs above, becoming longer and stronger along inner margins anteriorly, and with a few hairs laterad of the marginals; parafacials bare, each in profile about equal in width to third antennal segment (Text-fig. 2); cheek not twice as high as width of third antennal segment; arista short, bare; palpi small. Presutural thoracic bristle undifferentiated from the surrounding hairs which are numerous and erect, only the prescutellar dorsocentrals and acrostichals present and these very fine and short; scutellum with six marginal bristles, the apical pair at tip; some hairs below lower calypter on postnotum. Abdomen depressed, hardly longer than broad, dense piliferous punctures on entire dorsum; fifth sternite with a pair of short thumb-like processes which are separated at bases by a space less than their own length. Legs stout, fore tarsi a little widened. Apical wing venation as Text-fig. 3.

Length, 10 mm.

Type, French's Forest, N. Sydney, N.S.W., 14.xii.1923 (T. G. Campbell). Australian Museum.

Hyalomyia rufiventris Macquart differs from the above species in having the abdomen entirely red, and the calyptrae pale. It is also smaller, about 7 mm. in length, and the type specimen was from Tasmania. It was cited by Townsend as the genotype of a new genus, *Austrophasia*, without any basis except Macquart's figure of the wing.

Hyalomyia lativentris, n. sp.

Male.—Black, slightly shining, with dense pale grey dust on head, thorax, and abdomen. Antennae black; palpi yellowish at bases, fuscous at apices; hairs on cheeks and lower occiput white, the others black. Dorsum of thorax with four black vittae anteriorly, the median pair discontinued a little behind suture, the sublateral one on each side continued almost to hind margin; pleura grey

dusted, all the hairs fuscous; scutellum rather broadly grey dusted at apex. Abdomen when seen from behind densely whitish-grey dusted, disc of basal two tergites more or less black, when seen from above and one side the dorsum is almost entirely black, slightly shining and faintly violet or purplish tinged; hairs black. Legs entirely black, with black hairs. Wings very pale brown, or brownish hyaline, veins brown. Calyptrae yellowish-white. Halteres with yellow knob.

Eyes bare, facets on upper halves distinctly larger than those of lower halves; frons linear, each orbit with a single series of setulae along inner margin; head in profile as in *nigrihirta*. Presutural bristles and one pair of the presutural dorsocentral bristles in front of suture present but weak, prescutellar pair of dorsocentrals and acrostichals well developed, a short anterior second pair of dorsocentrals evident; scutellum short, lateral bristles long, apical pair not one-third as long as these and very fine; posterior sternopleural bristle long. Abdomen about as broad as long, almost circular in outline when seen from above, fourth visible tergite a little longer than third, its basal width about three times as great as its length in centre. Legs stout, without exceptional armature, hind tarsi not longer than hind tibia; tarsal claws and pulvilli long. Apical venation of wing as in Text-fig. 4; inner cross-vein a little more than one-third from apex of discal cell.

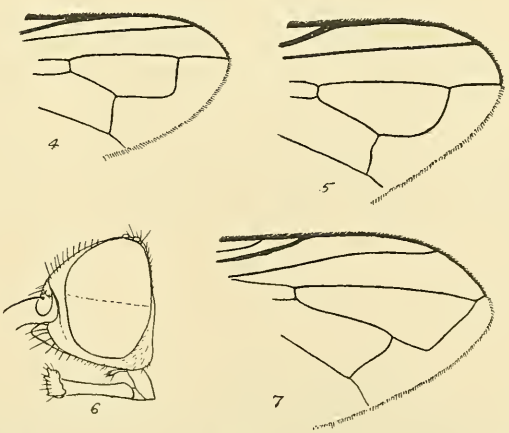
Length, 5 mm.

Type, Cairns, N. Queensland (J. F. Illingworth). United States National Museum.

The entirely black hind tarsi of this species give an additional character for distinguishing it from the following two.

HYALOMYIA LEPIDOFERA, n. sp.

Male.—Head black, interfrontalia black, orbits, face, cheeks, and occiput with dense pale grey dusting; antennae black; palpi fuscous; genal hairs pale. Thorax black, quite densely grey dusted, dorsum when seen from behind with a rather



Text-fig. 4.—Apex of wing of *Hyalomyia lativentris*, n. sp.
Text-fig. 5.—Apex of wing of *Hyalomyia lepidofera*, n. sp.
Text-fig. 6.—Head of *Hyalomyia nigrihirta*, n. sp., from the side.
Text-fig. 7.—Apex of wing of *Hyalomyia nigrihirta*, n. sp.

broad shining black vitta laterad of each dorsocentral line, the presutural submedian vittae faint or lacking, the dust on the area between the vittae behind suture brownish-yellow, not pale grey. Abdomen seen from behind with dense pale grey dusting, more yellowish on sides of dorsum of third and fourth visible tergites and rather changeable, with a dorsocentral vitta of variable width when seen from any angle, which is shining black with a purplish tinge; hairs black. Legs black, basal segment of fore and mid, and basal two segments of hind, tarsi testaceous; all femora yellow-haired basally, the hind pair most extensively so. Wings whitish hyaline, first and second veins yellowish, the others fuscous; a slight dark suffusion at apices of wings in type may not be normal. Calyptrae whitish. Halteres yellow.

Frons gradually narrowed above, in front of ocelli linear, orbits with hairs in a single series along inner margins; head as in *nigrihirta* in profile; facets of eyes slightly enlarged on upper halves. Presutural bristle well developed, only the prescutellar pair of dorsocentrals outstanding, the second pair and the prescutellar acrostichals weak and short; apical pair of scutellar bristles fine, about half as long as lateral pair and well before apex. Abdomen rather narrow for this group, fourth visible tergite 1·5 times as long as third, fifth curved downward and quite large, the hypopygium curved forward below abdomen. Legs stout, mid and hind femora noticeably so, the latter with many erect setulose hairs on all surfaces; hind tarsus not shorter than hind tibia. Inner cross-vein of wing at two-fifths from apex of discal cell; apical venation of wing as in Text-figure 5.

Length, 4 mm.

Type, Como, N.S.W., December, 1923 (H. Petersen).

The type specimen is in the collection of the writer, but it will be sent later to Australia for deposition in some museum there.

A female specimen taken along with the type male cannot be clearly distinguished from the female of the next species.

Hyalomyia nigrihirta, n. sp.

Male and female.—Very similar in all respects to *lepidofera*, differing in having the eyes close together on a greater extent of frons; the dorsum of thorax less densely grey dusted, without vittae, and not yellow dusted centrally behind the suture; the abdomen more broadly purplish-black on dorsum; and the hind femora black haired. In *lepidofera* the humeral angles have yellow scale-like hairs similar to those on the upper half of mesopleura, while in *nigrihirta* the hairs on the humeri and upper portion of mesopleura are black and but little widened. Head as in Text-figure 6, apical venation of wing as in Text-figure 7.

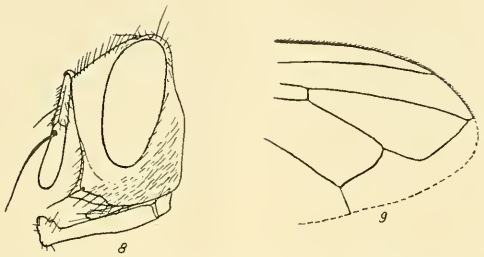
Length, 4 mm.

Type, male, allotype, and 11 paratypes, Seaford, Victoria (W. F. Hill). United States National Museum.

Genus Gymnosoma Meigen.

As noted in my Preliminary Catalogue of Australian Tachinidae (These Proceedings, liii, 1928, 651) Macquart recorded the European species *Gymnosoma rotundata* Meigen from Tasmania. I have not seen this species from that region and doubt its occurrence there. Lest there should be a closely related Australasian form, I figure the head of *G. fuliginosa* Robineau-Desvoidy, an American species,

and the apex of the wing of *rotundata* Meigen (Text-figs. 8, 9) as characters for the recognition of the genus.



Text-fig. 8.—Head of *Gymnosoma fuliginosa* Robineau-Desvoidy, from the side.
Text-fig. 9.—Apex of wing of *Gymnosoma rotundata* Meigen.

The European species is parasitic upon Pentatomidae, the eggs being laid on the host, which survives the emergence of the adult.

Tribe **Tachinini.**

This group as accepted herein is equivalent to the Tachininae of Lundbeck, and contains several more or less readily distinguished segregates, some notes on two of the Australian genera of which are presented below.

Gonia Group.

Characters of the group.—Prosternum setulose; hind coxae bare above bases of femora; no hairs on postnotum immediately below lower calypter; almost invariably a small bristle close to base of posterior notopleural bristle on the outer side; first wing vein bare, third setulose at base, the tip of latter well before apex of wing; second antennal segment always distinctly shorter than third; frons wide in both sexes; lower calypter with its inner margin deflected and adhering closely to contour of scutellum and postalar declivity, slightly bulging up just inside of margin.

There are two genera of the group in the available Australian material.

Genus Tritaxys Macquart.

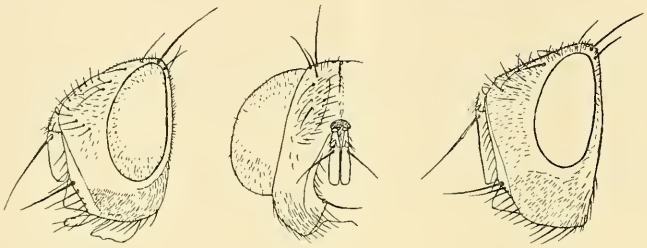
Macquart described *Gonia heterocera* in 1845, and *Tritaxys australis* in 1847, The two appear to be synonymous, as is indicated in my recently published catalogue of the Australian Tachinidae. Townsend erected the genus *Goniophania* for the reception of *heterocera*, which course would appear unnecessary if the above synonymy is correct.

Tritaxys heterocera (Macquart).

A large robust species averaging about 12 mm. in length. Head of the normal somewhat waxy pale testaceous yellow colouring of the genus *Gonia* Meigen, antennae red, third segment blackened from near base above, and from about middle below, to apex; palpi reddish-yellow. Thorax black, densely grey dusted, dorsum with four slender blackish vittae, humeral angles and scutellum, and sometimes the margins of mesonotum, showing reddish through the overlying dust. Abdomen black, sides basally showing reddish, densely dusted,

variably checkered in different lights. Legs black. Wings hyaline. Calyptrae white. Knobs of halteres yellow.

Head as in Text-figure 10; eyes with short hairs in front, almost bare behind; frons at vertex about one-third of the head width, interfrontalia not sharply defined, the bare stripe not half as wide as the bristled orbits; ocellars absent; second segment of arista about six times as long as thick. Presutural dorsocentrals and acrostichals usually in three pairs, postsutural dorsocentrals four, acrostichals three, pairs, basal abdominal tergite without apical central macrochaetae.



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Text-fig. 10.—Head of *Tritaxys heterocera* Macquart, from side, and in front (one side).
Text-fig. 11.—Head of *Anamastax goniaeformis* Macquart from the side.

Localities, French's Forest, N. Sydney, N.S.W., 14.xii.1923, and Como, N.S.W., various dates in November (T. G. Campbell); King George's Sound, Western Australia. All from the Australian Museum.

Genus Anamastax Brauer and von Bergenstamm.

Anamastax goniaeformis (Macquart). Text-fig. 11.

A species of rather similar appearance to the preceding one, but more robust and with the abdomen more conspicuously reddish on basal half or more. Structurally the species differ in that the second segment of the arista here is hardly longer than thick, the eyes are bare, the parafacials are not entirely haired, the antennae are comparatively shorter, the facial ridges are more strongly bristled, and the apex of abdomen in the female is more copiously bristled.

Length, 13-15 mm.

Locality, King George's Sound, W. Australia, no other data. Australian Museum.

Tribe **Actiini.**

This tribe consists of small species which rarely exceed 5 mm. in length, that have the third wing vein terminating at, or very close to, apex of wing, first posterior cell of wing open, the third antennal segment always much longer than the second, frequently very broad, and occasionally cleft from near base to apex in the male, the frons broad in both sexes, parafacials always bare on the greater portion of their extent, palpi present, prosternum setulose, notopleurals two in number, lower calypter large, subtransverse on hind margin, not deflected on inner

margin nor with a submarginal elevation, and the hind coxae bare above femora. The face is never carinate and the arista is normally without hairs.

The genus *Actia* Robineau-Desvoidy has been given a very wide interpretation by several writers, while others have split off segregates on various characters and applied generic names to these segregates. Bezzi has dealt with the genera of Tachinidae in which the fourth wing vein is obliterated, or almost so, on the section beyond the preapical bend and he has presented a key to these genera (*Ann. Mag. Nat. Hist.*, ser. 9, vol. 27, 1926, 236). In this paper he discusses the status of *Actia* and several related genera, but in limiting himself to those in which the fourth vein is obliterated or evanescent beyond the preapical bend he naturally omits the genus *Schizotachina* Walker, introducing it in a prior paper in which he described *Schizotachina fergusoni*, the paper being upon forms in which the third antennal segment is split or subdivided (Proc. Linn. Soc. N.S.W., xlviii, 1923, 647). This genus was subsequently discussed briefly by Curran (*Ent. Mitt.*, 16, No. 5, 1927, 355), who pointed out that the North American species may be distinguished from the Australian form placed in *Schizotachina* by Bezzi on the basis of the possession of but one bristle at base of the third wing vein, whereas in *fergusoni* there are bristles up to at least the inner cross-vein. This last author proposed a new subgenus of *Actia*, *Schizactiana*, for the reception of *valida*, n. sp., and *fergusoni* Bezzi, the former being the type species.

Thus so far only *Actia* has been recorded from Australia, and before me there are three species which are referable to the genus in its broadest sense.

Genus Actia Robineau-Desvoidy.

It would appear to be worthy of note that Lundbeck in his treatment of the Danish species included species with discal bristles (*Thryptocera* Macquart), and those without such bristles, the latter group, *Actia, sens. str.*, containing various species groups, in which the third vein only, the first and third veins, and the first, third, and fifth veins, are setulose. Most specialists consider the presence or absence of such setulae of generic significance, and apparently Curran inclined to this opinion when he decided that the American species of *Schizotachina* were generically distinct from the Australian species with similarly cleft third antennal segment as he stated that the former "genus" was at once distinguished from the Australian forms by the presence of but a single seta at base of third vein, the others having that vein setose at least to the anterior cross-vein. I am inclined to consider *Schizotachina* as at best a subgenus of *Actia*, but at present have no occasion to express a definite opinion, as no typical species from Australia is before me.

All three Australian species which I have seen have the base of the third wing vein setulose to, or beyond, inner cross-vein, and would on this basis appear to have a closer affinity to the European group containing *fissicornis* Strobl, *nigrohalterata* Villeneuve; *bicolor* Meigen, and *anomala* Zetterstedt, than to the typical forms as represented by *pilipennis* Fallen, *frontalis* Macquart, and *crassicornis* Meigen, the first-named of these three being the genotype of *Actia*. The more recently distinguished species *nudibasis* Stein is separable by the setulae on the first wing vein being confined to its apical section, the basal half being bare, the others having the vein setulose on its entire extent, and it appears worthy of note that several Oriental species agree in this character with *nudibasis*.

The three Australian species now before me may be distinguished as below.

Key to the Species.

1. Fourth wing vein obliterated beyond the preapical bend in both sexes; third antennal segment in male simple ..... *eucosmae* Bezzi
   Fourth wing vein distinct to margin of wing 2
2. Third antennal segment of male cleft from near base to apex, the lower branch longer than the upper one ..... *fergusoni* Bezzi
   Third antennal segment simple ..... *norma*, n. sp.

ACTIA FERGUSONI Bezzi.

I have before me a male specimen which I consider belongs to this species. The antennal characters are slightly different from those in Bezzi's original description, more resembling those given by Curran for *valida*, but the aristae are both broken off at apex of second segment so that it is impossible to determine the relative lengths of the segments. I am inclined to think that there is but one species involved here. Bezzi used a hand lens almost exclusively in his work and it may be that he did not correctly gauge the lengths of the aristal segments in *fergusoni* type.

Locality, Como, N.S.W., December, 1923, swept from flowers (H. Petersen).

ACTIA EUCOSMAE Bezzi.

I have examined a female specimen in the United States National Museum from the same source as the type specimen of this species and have compared it with a male in my possession. The antennae in the museum specimen differ from the description given by Bezzi in being largely infuscated on third segment and in having that segment about six, and not only three, times as long as second segment. The male has the third antennal segment entirely black, and wider than that of female, with a quite evident convexity near base on the upper side, and about eight times as long as the second segment.

Locality, Como, N.S.W., December, 1923, swept from flowers (H. Petersen).

ACTIA NORMA, n. sp.

Male.—Head yellowish testaceous, face white dusted, orbits densely grey dusted, interfrontalia orange, occiput fuscous, densely grey dusted; antennae orange, third segment largely dark brown apically; aristae dark brown; palpi and proboscis testaceous yellow. Thorax fuscous, densely grey dusted, without vittae, humeri and extreme apex of scutellum showing slightly testaceous through the dust. Abdomen testaceous, tergites darkened at apices, more noticeably so on fourth, the surface with grey dust, most dense at bases of tergites. Legs testaceous yellow, tarsi slightly browned. Wings hyaline, veins dark. Calyptrae whitish. Halteres yellow.

Frons at vertex almost one-third of the head width, all four verticals strong, postverticals short and hair-like, ocellars moderate, proclinate and divergent, each orbit about half as wide as interfrontalia, inner margins with two backwardly directed bristles above, three incurved bristles on anterior half, and two forwardly directed outer supraorbital bristles, a few short fine hairs laterad of the bristles anteriorly descending to level of apex of second antennal segment; third antennal segment fully three times as long as second and one-third as wide as long; aristae tapered on basal third, second segment not much longer than thick; palpi slender; cheek not as high as width of third antennal segment. Thorax normal. Abdomen subcylindrical, a pair of apical central bristles on second visible tergite and four strong bristles at apex of third, and other four at apex of fourth tergite. Legs

normal, hind femur with one long and one shorter preapical anteroventral bristle; hind tibia with four or five short anteroventral bristles, the most apical one longest, one posterodorsal bristle, and three or four irregular anterodorsal bristles. Inner cross-vein about two-fifths from base of discal cell, outer cross-vein about equally far from inner cross-vein and bend of fourth vein.

Length, 3 mm.

Type, Como, N.S.W., December, 1923, swept from flowers (H. Petersen).

All three species listed above were amongst some miscellaneous material sent to me by the late C. F. Baker from the Philippines, the whole having been collected for him by Mr. Petersen.